#### Amendments to the Claims

1. (Previously presented) A method for treating sexual arousal disorder comprising:

administering to a female subject in need thereof, an effective amount of an estrogen agonist / antagonist, and optionally,

co-administering an effective amount of a cyclic guanosine 3',5'-monophosphate elevator.

2. (Currently amended) A <u>The</u> method as in of claim 1 wherein said estrogen agonist / antagonist is a compound of the following formula (I):

(1)

wherein:

A is selected from CH<sub>2</sub> and NR;

B, D and E are independently selected from CH and N;

Y is

- (a) phenyl, optionally substituted with 1-3 substituents independently selected from R<sup>4</sup>;
- (b) naphthyl, optionally substituted with 1-3 substituents independently selected from R<sup>4</sup>;
- (c)  $C_3$ - $C_8$  cycloalkyl, optionally substituted with 1-2 substituents independently selected from  $R^4$ ;
- (d)  $C_3$ - $C_8$  cycloalkenyl, optionally substituted with 1-2 substituents independently selected from  $R^4$ ;

- (e) a five membered heterocycle containing up to two heteroatoms selected from the group consisting of -O-, -NR<sup>2</sup>- and -S(O)<sub>n</sub>-, optionally substituted with 1-3 substituents independently selected from  $R^4$ ;
- (f) a six membered heterocycle containing up to two heteroatoms selected from the group consisting of -O-, -NR $^2$  and -S(O)<sub>n</sub>- optionally substituted with 1-3 substituents independently selected from R $^4$ ; or
- (g) a bicyclic ring system consisting of a five or six membered heterocyclic ring fused to a phenyl ring, said heterocyclic ring containing up to two heteroatoms selected from the group consisting of -O-, -NR<sup>2</sup>- and -S(O)<sub>n</sub>-, optionally substituted with 1-3 substituents independently selected from R<sup>4</sup>;

Z<sup>1</sup> is

- (a)  $-(CH_2)_p W(CH_2)_q$ -;
- (b)  $-O(CH_2)_p CR^5R^6$ -;
- (c)  $-O(CH_2)_pW(CH_2)_q$ -;
- (d) -OCHR<sup>2</sup>CHR<sup>3</sup>-; or
- (e) -SCHR<sup>2</sup>CHR<sup>3</sup>-;

G is

(a)  $-NR^7R^8$ ;

$$-N (CH2)m Z2$$
(b)

wherein n is 0, 1 or 2; m is 1, 2 or 3; Z<sup>2</sup> is -NH-, -O-, -S-, or -CH<sub>2</sub>-; optionally fused on adjacent carbon atoms with one or two phenyl rings and, optionally independently substituted on carbon with one to three substituents and, optionally, independently on nitrogen with a chemically suitable substituent selected from R<sup>4</sup>; or

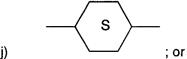
(c) a bicyclic amine containing five to twelve carbon atoms, either bridged or fused and optionally substituted with 1-3 substituents independently selected from R<sup>4</sup>; or

$$-OCH_2$$
  $N$ 

Z¹ and G in combination may be

W is

- -CH<sub>2</sub>-; (a)
- -CH=CH-; (b)
- -O-; (c)
- -NR<sup>2</sup>-; (d)
- -S(O)<sub>n</sub>-; (e)
- (f)
- -CR2(OH)-; (g)
- -CONR<sup>2</sup>-; (h)
- -NR<sup>2</sup>CO-; (i)



- (j)
- (k) -C≡C-;

R is hydrogen or C<sub>1</sub>-C<sub>6</sub> alkyl;

R<sup>2</sup> and R<sup>3</sup> are independently

- hydrogen; or (a)
- (b) C<sub>1</sub>-C<sub>4</sub> alkyl;

R⁴ is

- hydrogen; (a)
- halogen; (b)
- C<sub>1</sub>-C<sub>6</sub> alkyl; (c)
- C<sub>1</sub>-C<sub>4</sub> alkoxy; (d)
- C<sub>1</sub>-C<sub>4</sub> acyloxy; (e)
- (f) C<sub>1</sub>-C<sub>4</sub> alkylthio;
- C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl; (g)
- C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl; (h)
- (i) hydroxy (C<sub>1</sub>-C<sub>4</sub>)alkyl;
- (j) aryl (C<sub>1</sub>-C<sub>4</sub>)alkyl;
- -CO<sub>2</sub>H; (k)
- (l) -CN;
- -CONHOR; (m)
- (n) -SO<sub>2</sub>NHR;
- -NH<sub>2</sub>; (o)

- (p)  $C_1$ - $C_4$  alkylamino;
- (q) C<sub>1</sub>-C<sub>4</sub> dialkylamino;
- (r) -NHSO₂R;
- (s) -NO<sub>2</sub>;
- (t) -aryl; or
- (u) -OH;

 $R^5$  and  $R^6$  are independently  $C_1\text{-}C_8$  alkyl or together form a  $C_3\text{-}C_{10}$  carbocyclic ring;

R<sup>7</sup> and R<sup>8</sup> are independently

- (a) phenyl;
- (b) a C<sub>3</sub>-C<sub>10</sub> carbocyclic ring, saturated or unsaturated;
- (c) a  $C_3$ - $C_{10}$  heterocyclic ring containing up to two heteroatoms, selected from -O-, -N- and -S-;
  - (d) H;
  - (e)  $C_1$ - $C_6$  alkyl; or
  - (f) form a 3 to 8 membered nitrogen containing ring with R<sup>5</sup> or R<sup>6</sup>;

 $R^7$  and  $R^8$  in either linear or ring form may optionally be substituted with up to three substituents independently selected from  $C_1$ - $C_6$  alkyl, halogen, alkoxy, hydroxy and carboxy;

a ring formed by R<sup>7</sup> and R<sup>8</sup> may be optionally fused to a phenyl ring;

e is 0, 1 or 2;

m is 1, 2 or 3;

n is 0, 1 or 2;

p is 0, 1, 2 or 3;

q is 0, 1, 2 or 3;

or an optical or geometric isomer thereof; or a pharmaceutically acceptable salt, N-oxide, ester, quaternary ammonium salt or prodrug thereof.

3. (Currently amended) A The method as in of claim 2 wherein said estrogen agonist / antagonist is a compound of formula (IA):

wherein G is

$$,$$
 or  $-N$ 

R<sup>4</sup> is H, OH, F, or Cl; and B and E are independently selected from CH and N or an optical or geometric isomer thereof; or a pharmaceutically acceptable salt, N-oxide, ester, quaternary ammonium salt, or a prodrug thereof.

- 4. (Currently amended) A The method as in of claim 3 wherein said estrogen agonist / antagonist is (-)-cis-6-phenyl-5-[4-(2-pyrrolidin-1-yl-ethoxy)-phenyl]-5,6,7,8-tetrahydro-naphthalene-2-ol or an optical or geometric isomer thereof; a pharmaceutically acceptable salt, N-oxide, ester, quaternary ammonium salt, or a prodrug thereof.
- 5. (Currently amended) A <u>The</u> method as in of claim 4 wherein said estrogen agonist / antagonist is in the form of a D-tartrate salt.

Claims 6.-9. (canceled)

10. (Currently amended) A method <u>for treating sexual arousal disorder comprising:</u>

administering to a female subject in need thereof, an effective amount of an estrogen agonist / antagonist, and as in claim 1 further comprising co-administrering a cyclic guanosine 3',5'-monophosphate elevator.

- 11. (Currently amended) A <u>The</u> method as in of claim 10 wherein said cyclic guanosine 3',5'-monophosphate elevator is a PDE<sub>V</sub> phosphodiesterase inhibitor.
- 12. (Currently amended) A <u>The</u> method <u>as in of</u> claim 11 wherein the PDE<sub>V</sub> phosphodiesterase inhibitor is 1-[[3-(6,7-dihydro-1-methyl-7-oxo-3-propyl-1H-pyrazolo[4,3-d]pyrimidin-5-yl)-4-ethoxy-phenyl]sufonyl]-4-methylpiperazine citrate salt.

Claims 13.-39. (canceled)

- 40. (Currently amended) A The method as in of claim 1 wherein said estrogen agonist / antagonist is selected from the group consisting of tamoxifen, 4-hydroxy tamoxifen, raloxifene, toremifene, centchroman, idoxifene, 6-(4-hydroxy-phenyl)-5-[4-(2-piperidin-1-yl-ethoxy)-benzyl]-naphthalen-2-ol, {4-[2-(2-aza-bicyclo[2.2.1]hept-2-yl)-ethoxy]-phenyl}-[6-hydroxy-2-(4-hydroxy-phenyl)-benzo[b]thiophen-3-yl]-methanone, EM-652, EM-800, GW 5638, GW 7604, and optical or geometric isomers thereof; and pharmaceutically acceptable salts, N-oxides, esters, quaternary ammonium salts, and prodrugs thereof.
- 41. (Currently amended) A <u>The</u> method as in of claim 1 wherein said estrogen agonist / antagonist is a compound selected from the formulas V or VI:

$$R_{1B}$$
 $R_{2B}$ 
 $R_{5B}$ 
 $R_{6B}$ 
 $R_{4B}$ 
 $R_{4B}$ 
 $R_{4B}$ 
 $R_{4B}$ 
 $R_{5B}$ 
 $R_{6B}$ 
 $R_{6B}$ 
 $R_{6B}$ 
 $R_{6B}$ 
 $R_{6B}$ 

$$R_{1B}$$
 $R_{2B}$ 
 $R_{3B}$ 
 $R_{4B}$ 
 $R_{4B}$ 
 $R_{6B}$ 
 $R_{6B}$ 
 $R_{6B}$ 
 $R_{7B}$ 
 $R_{7B}$ 
 $R_{7B}$ 
 $R_{7B}$ 
 $R_{7B}$ 
 $R_{7B}$ 
 $R_{7B}$ 
 $R_{7B}$ 

#### wherein:

 $R_{1B}$  is selected from H, OH, -O-C(O)-C<sub>1</sub>-C<sub>12</sub> alkyl (straight chain or branched), -O-C<sub>1</sub>-C<sub>12</sub> alkyl (straight chain or branched or cyclic), or halogens or C<sub>1</sub>-C<sub>4</sub> halogenated ethers,

 $R_{2B}$ ,  $R_{3B}$ ,  $R_{4B}$ ,  $R_{5B}$ , and  $R_{6B}$  are independently selected from H, OH, -O-C(O)- $C_1$ - $C_{12}$  (straight chain or branched), -O- $C_1$ - $C_{12}$  (straight chain or branched or cyclic), halogens, or  $C_1$ - $C_4$  halogenated ethers, cyano,  $C_1$ - $C_6$  alkyl (straight chain or branched), or trifluoromethyl, with the proviso that, when  $R_{1B}$  is H,  $R_{2B}$  is not OH;

X<sub>A</sub> is selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, cyano, nitro, triflouromethyl, and halogen;

s is 2 or 3;

Y<sub>A</sub> is the moiety:

#### wherein:

- a)  $R_{7B}$  and  $R_{8B}$  are independently selected from the group of H,  $C_1$ - $C_6$  alkyl, or phenyl optionally substituted by CN,  $C_1$ - $C_6$  alkyl (straight chain or branched),  $C_1$ - $C_6$  alkoxy (straight chain or branched), halogen, -OH, -CF<sub>3</sub>, or -OCF<sub>3</sub>; or
- b) R<sub>7B</sub> and R<sub>8B</sub> are concatenated to form a five-membered saturated heterocycle containing one nitrogen heteroatom, the heterocycle being optionally substituted with

- 1-3 substituents independently selected from the group consisting of hydrogen, hydroxyl, halo,  $C_1$ - $C_4$  alkyl, trihalomethyl,  $C_1$ - $C_4$  alkoxy, trihalomethoxy,  $C_1$ - $C_4$  acyloxy,  $C_1$ - $C_4$  alkylthio,  $C_1$ - $C_4$  alkylsulfinyl,  $C_1$ - $C_4$  alkylsulfonyl, hydroxy ( $C_1$ - $C_4$ )alkyl, - $CO_2$ H, -CN, - $CONHR_{1B}$ , - $NH_2$ , - $NH(C_1$ - $C_4$  alkyl), - $N(C_1$ - $C_4$  alkyl)<sub>2</sub>, - $NHSO_2R_{1B}$ , - $NHCOR_{1B}$ , - $NO_2$ , or phenyl optionally substituted with 1-3 ( $C_1$ - $C_4$ )alkyl; or
- c)  $R_{7B}$  and  $R_{8B}$  are concatenated to form a six-membered saturated heterocycle containing one nitrogen heteroatom, the heterocycle being optionally substituted with 1-3 substituents independently selected from the group consisting of hydrogen, hydroxyl, halo,  $C_1$ - $C_4$  alkyl, trihalomethyl,  $C_1$ - $C_4$  alkoxy, trihalomethoxy,  $C_1$ - $C_4$  acyloxy,  $C_1$ - $C_4$  alkylthio,  $C_1$ - $C_4$  alkylsulfinyl,  $C_1$ - $C_4$  alkylsulfonyl, hydroxy ( $C_1$ - $C_4$ )alkyl, - $CO_2H$ , -CN, - $CONHR_{1B}$ , - $NH_2$ , - $NH(C_1$ - $C_4$  alkyl), - $N(C_1$ - $C_4$  alkyl), - $N(C_1$ - $C_4$  alkyl); or
- d)  $R_{7B}$  and  $R_{8B}$  are concatenated to form a seven-membered saturated heterocycle containing one nitrogen heteroatom, the heterocycle being optionally substituted with 1-3 substituents independently selected from the group consisting of hydrogen, hydroxyl, halo,  $C_1$ - $C_4$  alkyl, trihalomethyl,  $C_1$ - $C_4$  alkoxy, trihalomethoxy,  $C_1$ - $C_4$  acyloxy,  $C_1$ - $C_4$  alkylthio,  $C_1$ - $C_4$  alkylsulfinyl,  $C_1$ - $C_4$  alkylsulfonyl, hydroxy ( $C_1$ - $C_4$ )alkyl, - $CO_2$ H, -CN, - $CONHR_{1B}$ , - $NH_2$ , - $NH(C_1$ - $C_4$  alkyl), - $N(C_1$ - $C_4$  alkyl)<sub>2</sub>, - $NHSO_2$   $R_{1B}$ , - $NHCOR_{1B}$ , - $NO_2$ , or phenyl optionally substituted with 1-3 ( $C_1$ - $C_4$ )alkyl; or
- e) R<sub>7B</sub> and R<sub>8B</sub> are concatenated to form an eight-membered saturated heterocycle containing one nitrogen heteroatom, the heterocycle being optionally substituted with 1-3 substituents independently selected from the group consisting of hydrogen, hydroxyl, halo, C<sub>1</sub>-C<sub>4</sub> alkyl, trihalomethyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, trihalomethoxy, C<sub>1</sub>-C<sub>4</sub> acyloxy, C<sub>1</sub>-C<sub>4</sub> alkylthio, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, hydroxy (C<sub>1</sub>-C<sub>4</sub>)alkyl, -CO<sub>2</sub>H, -CN, -CONHR<sub>1</sub>, -NH<sub>2</sub>, -NH(C<sub>1</sub>-C<sub>4</sub> alkyl), -N(C1-C4 alkyl)<sub>2</sub>, -NHSO<sub>2</sub>R<sub>1B</sub>, -NHCOR<sub>1B</sub>, -NO<sub>2</sub>, or phenyl optionally substituted with 1-3 (C<sub>1</sub>-C<sub>4</sub>)alkyl; or
- f)  $R_{7B}$  and  $R_{8B}$  are concatenated to form a saturated bicyclic heterocycle containing from 6-12 carbon atoms either bridged or fused and containing one nitrogen heteroatom, the heterocycle being optionally substituted with 1-3 substituents independently selected from the group consisting of hydrogen, hydroxyl, halo,  $C_1$ - $C_4$  alkyl, trihalomethyl,  $C_1$ - $C_4$  alkoxy, trihalomethoxy,  $C_1$ - $C_4$  acyloxy,  $C_1$ - $C_4$  alkylthio,  $C_1$ -

 $C_4$  alkylsulfinyl,  $C_1$ - $C_4$  alkylsulfonyl, hydroxy ( $C_1$ - $C_4$ )alkyl, - $CO_2$  H, -CN, -  $CONHR_{1B}$ , - $NH_2$ , - $NH(C_1$ - $C_4$  alkyl), - $N(C_1$ - $C_4$  alkyl)<sub>2</sub>, - $NHSO_2R_{1B}$ , - $NHCOR_{1B}$ , - $NO_2$ , or phenyl optionally substituted with 1-3 ( $C_1$ - $C_4$ ) alkyl; or an optical or geometric isomer thereof; or a pharmaceutically acceptable salt, N-oxide, ester, quaternary ammonium salt or prodrug thereof.

42. (Currently amended) A <u>The</u> method as in of claim 41 wherein said estrogen agonist / antagonist is the compound, TSE-424, of formula Va below:

or an optical or geometric isomer thereof; or a pharmaceutically acceptable salt, Noxide, ester, quaternary ammonium salt or prodrug thereof.

43. (Currently amended) A <u>The</u> method as in of claim 1 wherein said estrogen agonist / antagonist is EM-652 of formula III below or is EM-800 of formula IV below:

or an optical or geometric isomer thereof; or a pharmaceutically acceptable salt, Noxide, ester, quaternary ammonium salt or prodrug thereof.

- 44. (New) A method for treating sexual arousal disorder comprising: administering to a female subject in need thereof, an effective amount of (-)-cis-6-phenyl-5-[4-(2-pyrrolidin-1-yl-ethoxy)-phenyl]-5,6,7,8-tetrahydro-naphthalene-2-ol or an optical or geometric isomer thereof; a pharmaceutically acceptable salt, N-oxide, ester, quaternary ammonium salt, or a prodrug thereof.
- 45. (New) The method of claim 44 wherein (-)-cis-6-phenyl-5-[4-(2-pyrrolidin-1-ylethoxy)-phenyl]-5,6,7,8-tetrahydro-naphthalene-2-ol, D-tartrate salt is administered.

  46. (New) The method of claim 44 further comprising co-administering an effective amount of a cyclic guanosine 3',5'-monophosphate elevator.
- 47. (New) The method of claim 46 wherein the cyclic guanosine 3',5'-monophosphate elevator is a PDE<sub>V</sub> phosphodiesterase inhibitor.
- 48. (New) The method of claim 47 wherein the PDE<sub>V</sub> phosphodiesterase inhibitor is 1-[[3-(6,7-dihydro-1-methyl-7-oxo-3-propyl-1H-pyrazolo[4,3-d]pyrimidin-5-yl)-4-ethoxy-phenyl]sufonyl]-4-methylpiperazine citrate salt.

- 49. (New) The method of claim 45 further comprising co-administering an effective amount of 1-[[3-(6,7-dihydro-1-methyl-7-oxo-3-propyl-1H-pyrazolo[4,3-d]pyrimidin-5-yl)-4-ethoxy-phenyl]sufonyl]-4-methylpiperazine citrate salt.
- 50. (New) The method of claim 45 wherein the female subject is postmenopausal.
- 51. (New) The method of claim 45 wherein the female subject is premenopausal.
- 52. (New) The method of claim 49 wherein the female subject is postmenopausal.
- 53. (New) The method of claim 49 wherein the female subject is premenopausal.